



COMNAVREG HAWAII

DBEDT Environmental Purchasing and Practices Conference and Vendor Expo

“The CNRH Energy Management Program”

(26 Jun 02)



COMNAVREG HAWAII ENERGY MANAGEMENT PROGRAM



Region's Mission Statement:

Exercise military command and provide primary support over assigned shore organizations; serve as regional area coordinator; provide a Base Operating Support (BOS) infrastructure to the operating forces of the Navy, other naval organizations and tenants; oversee Class I and Class II land and facilities and insure their optimum use; provide guidance and standards for BOS services; plan, program and budget for resources to support BOS requirements at assigned shore activities; assess and improve installation management functions, quality of products, services and readiness of assigned shore activities, and perform such other functions and tasks as may be assigned by higher authority.



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What is Navy Region Hawaii (in terms of shore facilities)?

- 1700 Facilities
 - Administration, Recreation, Dining, Bachelor Quarters, Industrial
- 10.5 Million square feet of facilities.
- Above numbers excludes open ended structures, playing fields, parking lots, and Navy housing units.

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Who is Navy Region Hawaii (in terms of shore facilities)?

- Code N464, CDR Van Dobson, Facilities Director
- LCDR Tony Ammons, Facilities Operations
- 10 Officers who make up the APWO Team Leaders
- 3 Civilian supervisors.
- 40 Civilian workers.

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What is the Region's Energy Program's goal:

Reduce energy consumption (increase energy efficiency) and emissions per EXORD 13123 (and bills) while maintaining service levels (driven by operational requirements.)

- 30% decrease in energy density by FY05 and 35% decrease by FY10 based on FY85 baseline energy density.

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PROGRAM DEFINITIONS:

MBTU = ALL energy used by a building including electricity, water, sewer, fuel gas, cooking gas, and compressed air.

KSF = gross square footage of facility based on NFADB records.

UESC = Utility Energy Saving Contract; used to be called a Basic Ordering Agreement (BOA) or Demand Side Management (DSM) contract; a repair contract that reduces energy and is paid for by calculated savings; generally, payments are consistent throughout the life of the contract term.

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PROGRAM DEFINITIONS (cont'd):

ESPC = Energy Saving Performance Contract; a repair contract that reduces energy and is paid for by actual savings; generally, payments can vary throughout the life of the contract term.

Energy Rebates = Money set aside by a local Utility Company to encourage EC devices; paid directly to Region to be used for future EC devices or projects.

Measurements and Verification: important to ensure Region actually saves money.

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Why a NRH EC program?

- Defense Utility Energy Reporting System (DUERS) “grades” NRH on the energy density of facilities; the lower, the better.
- NRH EC Program acts as a clearinghouse for EC issues.
- Saved energy \$ can be reinvested back into the Region (engineering, investigations, construction, devices.); used to leverage EC projects.
- Directs the NRH EC Alternate Financing Contracts (UESC/ESPC).

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What is EC Alternate Financing?

- Region can secure funding for design and/or construction via a third party to reduce energy.
- Region pays back the “borrowed” money using allocated energy money.
- Payments are usually spread out over a period of time.
- Projects must meet 10 year payback or receive CPF approval.
- Projects low on an IPL may still be accomplished if they meet EC criteria.

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What has the Region done to make itself more efficient?

- Lighting retrofits (CFLs, LEC, LED, metal halides).
- Motor replacements (premium efficiency motors)
- Variable speed motors.
- Higher efficiency AC equipment.
- DDC controls for operations AND maintenance.
- PV lighting (piers and traffic).

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What is the future of the Region's Energy Program?

- More of the same (lighting, motors, VSDs, AC, DDC).
- Greater focus on "Facilities" in conjunction with "efficiency".
- Greater emphasis on DE/RE (PV, fuel cells, CHP).
- Greater participation in RE RD projects.
- Out of the box application of technology to solve traditional issues (solar film vice larger AC equipment; LCD terminals to reduce heat).
- Synergy! (PWC, PACDIV, CINCPACFLT, OSD, ASN, FEMP, DOE, National Labs, ACOE, DBEDT, RH)

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